

Listing of Claims

1 – 19 (cancelled)

20. (new) A method of de-watering an article subjected to processing in which a liquid, such as water, collects on a surface of the article, which method comprises:

conveying the article past a suction device so that the said surface of the article passes adjacent to an inlet of the suction device;

directing at least one jet of air at the said surface of the article as the said surface passes by the inlet of the suction device to displace liquid from the said surface of the article into the air adjacent to the inlet of the suction device; and operating the suction device to draw the liquid-containing air into the inlet of the suction device;

using a suction device comprising an air moving device which is based on the Coanda effect and which comprises a tubular body having an inlet opening at one end and an outlet connection at the other end; and

directing the or each jet of air at the surface of the article through a nozzle located in the inlet opening of the tubular body.

21. (new) A method according to claim 20 comprising directing a jet of air at the surface of the article through a nozzle positioned centrally within the inlet opening of the tubular body.

22. (new) A method according to claim 21 comprising delivering compressed air to the nozzle from a source of compressed air through a compressed air pipe extending within the suction device.

23. (new) A method according to claim 20 comprising detecting the presence of an article adjacent to the inlet opening of the tubular body and directing a pulse of air at the said surface of the article in response to the detection of the article.

24. (new) A method according to claim 20 comprising directing a plurality of jets of air at the said surface of the article through a plurality of nozzles distributed around the periphery of the inlet opening of the tubular body.

25. (new) A method according to claim 24 comprising supplying compressed air to the plurality of nozzles from a chamber of the tubular body which is connected to a source of compressed air.

26. (new) A method according to claim 20 comprising passing the articles beneath the inlet opening of the tubular body.

27. (new) Apparatus for de-watering articles subjected to processing in which a liquid, such as water, collects on a surface of the article, comprising:

a suction device having an inlet;

means for conveying an article past the suction device so that the said surface of the article passes by the inlet of the suction device;

means for directing at least one jet of air at the said surface of the article as the surface passes by the inlet of the suction device to displace liquid from the said surface of the article into the air adjacent the inlet of the suction device;

wherein the suction device comprises an air moving device which is based on the Coanda effect and which comprises a tubular body having an inlet opening at one end and an outlet connection at the other end; and

the means for directing the or each jet of air at the said surface of the article comprises a nozzle located in the inlet opening of the tubular body.

28. (new) Apparatus according to claim 27 wherein the means for directing the jet of air at the said surface of the article comprises a nozzle positioned centrally within the inlet opening of the tubular body.

29. (new) Apparatus according to claim 27 wherein the nozzle is connected to a source of compressed air by a compressed air pipe extending within the suction device.

30. (new) Apparatus according to claim 27 comprising means for detecting the presence of an article adjacent to the inlet opening of the tubular body and means for directing a pulse of air at the said surface of the article in response to the detection of the article by the detecting means.

31. Apparatus according to claim 27 wherein the means for directing the jet of air at the said surface of the article comprises a plurality of nozzles distributed around the inlet opening of the tubular body.

Ex. 32. ~~33.~~ (new) Apparatus according to claim 31 wherein the plurality of nozzles are equally spaced around the inlet opening of the tubular body.

Ex. 33, 34. (new) Apparatus according to claim 31 wherein the plurality of nozzles are mounted on the tubular body and are supplied with pressurized air from a chamber of the tubular body which is connected to a source of compressed air.